

0500

OIPE

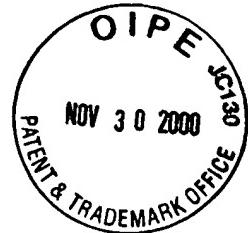
ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/709,131

DATE: 11/27/2000
TIME: 14:04:36

Input Set : A:\959830u1.app
Output Set: N:\CRF3\11272000\I709131.raw

3 <110> APPLICANT: Gartenhaus, Ronald P.
 5 <120> TITLE OF INVENTION: MCT-1, A Human Oncogene
 7 <130> FILE REFERENCE: 209598.5002/30U1
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/709,131
 10 <141> CURRENT FILING DATE: 2000-11-10
 12 <150> PRIOR APPLICATION NUMBER: US 60/085,029
 13 <151> PRIOR FILING DATE: 1998-05-11
 15 <150> PRIOR APPLICATION NUMBER: PCT/US99/10184
 16 <151> PRIOR FILING DATE: 1999-05-10
 18 <160> NUMBER OF SEQ ID NOS: 10
 20 <170> SOFTWARE: PatentIn Ver. 2.1
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 944
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Homo sapiens
 27 <220> FEATURE:
 28 <223> OTHER INFORMATION: Human cDNA
 30 <400> SEQUENCE: 1
 31 gctacacctcca actgctgagg aaccggttgc ctaaaaggag cggcaaaaag cgcctacgtg 60
 32 gagtcggagag gagcggaaagt agtcagattt gacttagagc cgttaaqcgcc ggctggctct 120
 33 cgttttccgg ataacgacta caacctccgac tgcgtatgcc ggcccttcctc gtgtgagggg 180
 34 atctggccgga cccctgcaaa ttcaatttctt ttcccatatcc gggcccttcc ctatcgctcg 240
 35 ccccttcacc ttggatcatg ttcaagaat ttgatggaaa agaaaaatgtg tccaaactgca 300
 36 tccatgtgaa aacttcgatg attaagggtt ttaagaatca attgatagag caatttccag 360
 37 gtatttgaaacc atggcttaat caaatcatgc ctaaggaaaga tccgttcaaa atagtccgat 420
 38 gccatgaaca tatagaataat ttacatgtt atggagaattt actttttttt agacaaagag 480
 39 aaggcccttt ttatccaacc ctaagattac ttccaaataat tccttttata ctgccacacc 540
 40 agcagggttga taaaggagcc atcaaatttt tactcagtgg agcaaatatc atgtgtccca 600
 41 ggcttaactt ctcctggcgc taagctttac cctctgtcgag tagataccat tgttgtatc 660
 42 atggcagaact gaaaacagea tgctctatgt gtttggatc tgaagatgtc tgcagaagac 720
 43 attggaaaatg tcaacaaagg aattggcattt gaaaatatcc attttttttt tttatggctg 780
 44 tggcatatgtt agacatataat atgaggctca yaaggaatgc acttgggcta aatatggata 840
 45 ttgtgtctgtt tctgtgttg tgcgtgtgt tgacagcatg aagataatgc ctgtgttat 900
 46 gctgaataaa ttccaggat gctaaaaaaaaaaa aaaaaaaaaaaa aaaa 944
 49 <210> SEQ ID NO: 2
 50 <211> LENGTH: 121
 51 <212> TYPE: PRT
 52 <213> ORGANISM: Homo sapiens
 54 <220> FEATURE:
 55 <223> OTHER INFORMATION: Putative sequence of protein encoded by human cDNA
 56 of SEQ ID NO: 1
 58 <400> SEQUENCE: 2
 59 Met Phe Lys Lys Phe Asp Glu Lys Glu Asn Val Ser Asn Cys Ile Gln
 60 1 5 10 15
 62 Leu Lys Thr Ser Val Ile Lys Gly Ile Lys Asn Gln Leu Ile Glu Gln
 63 20 25 30
 65 Phe Pro Gly Ile Glu Pro Trp Leu Asn Gln Ile Met Pro Lys Lys Asp



RECEIVED
DEC 14 2000
OIPE/JCWS

RAW SEQUENCE LISTING DATE: 11/27/2000
PATENT APPLICATION: US/09/709,131 TIME: 14:04:36

Input Set : A:\959830ul.app
Output Set: N:\CRF3\11272000\I709131.raw

66 35 40 45
68 Pro Val Lys Ile Val Arg Cys His Glu His Ile Glu Ile Leu Thr Val
69 50 55 60
71 Asn Gly Glu Leu Leu Phe Phe Arg Gln Arg Glu Gly Pro Phe Tyr Pro
72 65 70 75 80
74 Thr Leu Arg Leu Leu His Lys Tyr Pro Phe Ile Leu Pro His Gln Gln
75 85 90 95
77 Val Asp Lys Gly Ala Ile Lys Phe Val Leu Ser Gly Ala Asn Ile Met
78 100 105 110
80 Cys Pro Arg Leu Asn Phe Ser Trp Ser
81 115 120
84 <210> SEQ ID NO: 3
85 <211> LENGTH: 25
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer HuT 78F
92 <400> SEQUENCE: 3
93 cattggagac cgctcacac acaggc 25
96 <210> SEQ ID NO: 4
97 <211> LENGTH: 24
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer HuT 78R
104 <400> SEQUENCE: 4
105 ctgtcaaaat agtccgatgc cacg 24
108 <210> SEQ ID NO: 5
109 <211> LENGTH: 24
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: pCMV-MCT-1
115 Generation Primer (+)
117 <400> SEQUENCE: 5
118 gctgaggatc cggttgccata aaag 24
121 <210> SEQ ID NO: 6
122 <211> LENGTH: 23
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Description of Artificial Sequence: pCMV-MCT-1
128 Generation Primer (-)
130 <400> SEQUENCE: 6
131 tctggtaat tcattcagca taa 23
134 <210> SEQ ID NO: 7
135 <211> LENGTH: 943
136 <212> TYPE: DNA
137 <213> ORGANISM: Homo sapiens

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/709,131

DATE: 11/27/2000
 TIME: 14:04:36

Input Set : A:\959830ul.app
 Output Set: N:\CRF3\11272000\I709131.raw

139 <220> FEATURE:
 140 <223> OTHER INFORMATION: cDNA encoding MCT-1
 142 <400> SEQUENCE: 7
 143 qctaccccca actcytggagg aaccgggtgc ctaaaaggag ccggccaaag cycctaacgtg 60
 144 gagttccagag gagcggaaagt agtcagattt gactggagac cgtaaagcgc ggctggctct 120
 145 cyttttcccg ataacgacta cagctccgac tgtcagtgc gcgccttcctc gtgtgagggg 180
 146 atctgccggqa cccctgcaaa ttcaatttc ttccatctc ggcccttcctc ctatcgccgc 240
 147 ccccttcacc ttggatcatg ttcaagaataat ttgatgaaaa agaaaaatgtg tccaactgca 300
 148 tccagttgaa aacttcagtt attaaggta ttaagaatca attyatagag caatttccag 360
 149 qtatgtgaacc atggcttaat caaatcatgc ctaagaaaga tcctgtcaaa atagtcggat 420
 150 gccatgaaca tatagaaaatc cttacagtaa atggaaaattt actctttttt agacaaagag 480
 151 aaggccctt ttagccaaacc ctaagattac ttccacaataa tccttttatac ctggccacacc 540
 152 agcagggttga taaaggagcc atcaaatttg tactcagtgg agcaaaatatac atgtgtccag 600
 153 gcttaacttc tcctggagct aagctttacc ctgtgtcagt agataccatt gttgttatca 660
 154 tggcagaagg aaaacacgcat gctctatgtg tgaggatgtcal gaagatgtctl gtagaaagaca 720
 155 ttgagaaaatg caacaagga attqgcattt aaaaatatcca tttttttatgatgggtgt 780
 156 ggcataatgaa gacataaaaaa tgagccctcag aaggaaatgca ctttggctaa atatggatata 840
 157 tgtgtgtat ctgtgtttgt gtctgtgtgt gacagcatga agataatgca tgtgggtatg 900
 158 ctgataaaat tcaccagatg ctaaaaaaaaaaaaaaa 943
 161 <210> SEQ ID NO: 8
 162 <211> LENGTH: 181
 163 <212> TYPE: PRT
 164 <213> ORGANISM: Homo sapiens
 166 <220> FEATURE:
 167 <223> OTHER INFORMATION: MCT-1 Protein
 169 <400> SEQUENCE: 8
 170 Met Phe Lys Lys Phe Asp Glu Lys Glu Asn Val Ser Asn Cys Ile Gln
 171 1 5 10 15
 173 Leu Lys Thr Ser Val Ile Lys Gly Ile Lys Asn Gln Leu Ile Glu Gln
 174 20 25 30
 176 Phe Pro Gly Ile Glu Pro Trp Leu Asn Gln Ile Met Pro Lys Lys Asp
 177 35 40 45
 179 Pro Val Lys Ile Val Arg Cys His Glu His Ile Glu Ile Leu Thr Val
 180 50 55 60
 182 Asn Gly Glu Leu Leu Phe Phe Arg Gln Arg Glu Gly Pro Phe Tyr Pro
 183 65 70 75 80
 185 Thr Leu Arg Leu Leu His Lys Tyr Pro Phe Ile Leu Pro His Gln Gln
 186 85 90 95
 188 Val Asp Lys Gly Ala Ile Lys Phe Val Leu Ser Gly Ala Asn Ile Met
 189 100 105 110
 191 Cys Pro Gly Leu Thr Ser Pro Gly Ala Lys Leu Tyr Pro Ala Ala Val
 192 115 120 125
 194 Asp Thr Ile Val Ala Ile Met Ala Glu Gly Lys Gln His Ala Leu Cys
 195 130 135 140
 197 Val Gly Val Met Lys Met Ser Ala Glu Asp Ile Glu Lys Val Asn Lys
 198 145 150 155 160
 200 Gly Ile Gly Ile Glu Asn Ile His Tyr Leu Asn Asp Gly Leu Trp His
 201 165 170 175
 203 Met Lys Thr Tyr Lys

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/709,131 DATE: 11/27/2000
TIME: 14:04:36

Input Set : A:\959830ul.app
Output Set: N:\CRF3\11272000\I709131.raw

204 180
207 <210> SEQ ID NO: 9
208 <211> LENGTH: 58
209 <212> TYPE: PRT
210 <213> ORGANISM: Homo sapiens
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Portion of MCT-1 protein sequence for comparison
214 with Cyclin H protein sequence
216 <400> SEQUENCE: 9
217 Lys Glu Asn Val Ser Asn Cys Ile Gln Leu Lys Thr Ser Val Ile Lys
218 1 5 10 15
220 Gly Ile Lys Asn Gln Leu Ile Glu Gln Phe Pro Gly Ile Glu Pro Trp
221 20 25 30
223 Leu Asn Gln Ile Met Pro Lys Lys Asp Pro Val Lys Ile Val Arg Cys
224 35 40 45
226 His Glu His Ile Glu Ile Leu Thr Val Asn
227 50 55
230 <210> SEQ ID NO: 10
231 <211> LENGTH: 50
232 <212> TYPE: PRT
233 <213> ORGANISM: Homo sapiens
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Portion of Cyclin H protein sequence for
237 comparison with MCT-1 protein sequence
239 <400> SEQUENCE: 10
240 Lys Glu Asn Arg Thr Cys Leu Ser Gln Leu Leu Asp Ile Met Lys Ser
241 1 5 10 15
243 Met Arg Asn Leu Val Lys Lys Tyr Glu Pro Pro Arg Ser Glu Glu Val
244 20 25 30
246 Ala Val Leu Lys Gln Lys Leu Glu Arg Cys His Ser Ala Glu Leu Ala
247 35 40 45
249 Leu Asn
250 50

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/709,131 DATE: 11/27/2000
TIME: 14:04:37

Input Set : A:\959830ul.app
Output Set: N:\CRF3\11272000\I709131.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number